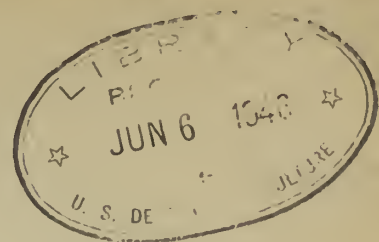


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FARM CREDIT ADMINISTRATION
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

MILK PRODUCT RECORD FORMS
for
COOPERATIVE DISTRIBUTORS

By

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COOPERATIVE RESEARCH AND SERVICE DIVISION

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Product Accounting Forms
for
Cooperative Milk Distributors

For a number of years, requests have been received intermittently from cooperative milk distributing associations for product record forms. Recently, the Dairy Section of the Cooperative Research and Service Division (Farm Credit Administration) has started to accumulate such forms and reproduce them in uniform size to be assembled in binders. The first 29 forms so reproduced are presented herewith. Others will be added from time to time and substitutions will be made to illustrate other or better methods of product accounting.

There is little, if anything, new in these first 29 illustrations. All of them with numerous variation are already in use. Many publishers are offering dairy product accounting forms which they prepare in large quantities at apparently reasonable prices. The fault with some of them is that they do not carry instructions for a complete and uninterrupted series of records showing utilization and disposition of milk or butterfat from the intake scale to the final money records of sales.

Investigations indicate that a greater percentage of the operating loss of both private and cooperative dairy plants results from product disappearance than from money. Many plant records do not show that milk weighed in and paid for gets into the cooler. Practically all plants require drivers' requisitions or orders, but many of them do not know what was in the cooler when bottling was completed, nor what remained after all loads were out. They do not know what or how much went onto delivery trucks for which there was no record made on requisitions. There is no possibility, in those plants, of discovering a sale from the cooler made without a charge; no chance to uncover thefts or carelessness.

Product losses can be serious. Many instances have been noted of product losses running into hundreds of dollars a month. All could have been detected and recurrences prevented by daily product balances. In the recent case of a small plant, the shortage was over 20,000 pounds of fluid milk in one month. Another plant handling about 50,000 pounds of milk a day had an indicated loss of about \$500 a month in butter alone. Other products were not checked in this plant.

Frequently the daily balances of milk are not enough. One fairly large plant, which was watching its daily milk weights, reported an average of 6 percent loss in butterfat. Monthly balances are not satisfactory. At the end of a month no one can remember what took place on the first of the month or on any intervening day. The only protection is in daily product balances.

Such balances have to be accurate. Employees must be held responsible for the products under their keeping and be charged for losses or

shortages. The system must be accurate and "hard boiled." Carelessness apparently is a more common fault than dishonesty and is correspondingly more costly to the employer.

There probably always have been and always will be shortages of milk between the intake scale and the final package. It is impossible to recover losses due to spillage and evaporation in the pasteurizer, and the milk and fat that cling to pipes, vats, and tanks. However, they can be reduced to a minimum. Some plants are satisfied with 45 quarts per 100 pounds of milk weighed in. That allows a loss of over 3 percent. A series of monthly records carried at one plant receiving from 30,000 to 40,000 pounds a day for several years, shows losses of about 3/4 of one percent and, it is believed the intake scale records were honest and accurate.

There is much less justification for a shortage in packaged products. When a 10 gallon can of 20 percent cream is found listed as 40 percent cream, or a carton of butter is only half filled, something went wrong. If such differences are charged to the cooler man, they usually stop. It is not possible to detail, here, all or any number of the types of shortages that have been observed. Severe checking and unquestionably accurate records will uncover all of the large shortages and most of the small ones.

Many plants, particularly the small and medium size ones, do not have scales or other accurate measuring devices for weighing the milk going to different uses. In many such plants a cut-off at the intake scale will establish the weight of milk to be pasteurized or to be separated, or used for other purposes. After the pounds for each use have been established, subsequent records will disclose processing losses or shrinkage. Variations from a normal minimum should be investigated. Daily losses in each process should be recorded and summarized by months.

Descriptions of Forms

The purpose of the forms illustrated below is to show the types of records that will be helpful. Probably each plant may wish to add to or eliminate columns from these forms, or change their designs. The point is that each plant should draw forms for each record to suit its own needs.

Form No. 1 - Milk Weight Summary. Needs no explanation.

Form No. 2 - Daily Weight Report. Can be used with a punch board and eliminate Form No. 1.

Form No. 3 - Patrons' Statements. Used by some plants. Can be eliminated in milk plants by saving cross-footing ribbons for either Form No. 1 or Form No. 2.

Form No. 4 - Bad Order Tag. In common use.

Form No. 5 - Can Return Tag. In common use.

Form No. 6 - Milk and Butterfat Balance. One of the most important and the most sadly neglected record in milk plants. It should be made every day and daily totals be summarized by months.

Form No. 7 - Raw Milk Sales. Where needed this is a good day book record.

Form No. 8 - Pasteurizing and Packaging. Many plants fail to keep a record of the composition of pasteurized milk and milk packages until the cooler is inventoried. A regrettable number of them do not, then, take such inventories. That is just defying fate. If butterfat losses are evident, it is advisable or even necessary to reduce all packaged milk to pounds and to check the butterfat in packages.

Form No. 9 - Standardizing Record. This will help operators in developing a uniform method of standardizing. The Farm Credit Administration can supply mimeographed circulars on standardizing methods.

Form No. 10 - Separator Record. Many 10 gallon cans of 40 percent cream have disappeared because no one knew how much milk of what test went into a separator. And - don't forget that over 2/3 of the nourishing solids of whole milk are in the skim milk and are worth money.

Form No. 11 - Cream Disposition. This is a good record because most plants do a poor job of keeping cream records on a cooler inventory.

Form No. 12 - Butter Production.

Form No. 13 - Butter Packaging, Sales, Inventory. Sending old cream and route returns to the churn without a record is sheer recklessness. We know of several instances of losses of from \$500 to \$1,000 in single months, because of a lack of checking methods. It is always advisable to keep a separate inventory record of butter.

Form No. 14 - Ice Cream Mix Formula.

Form No. 15 - Ice Cream Summary. Too many ice cream makers just stir up a batch of mix from memory. It is wise to keep records similar to these suggestions. Like butter, it is helpful to keep a separate inventory of ice cream.

Form No. 16 - Ice Cream Drivers' Requisition. No comments necessary.

Form No. 17 - Dry Cottage Cheese.

Form No. 18 - Creamed Cottage Cheese. Skim milk and its products are needed for food particularly in these war times. Besides, they are worth money and processing records promote economy. In any event, keep a record of the products.

Form No. 19 - Cultured Buttermilk.

Form No. 20 - Milk Powders.

Form No. 21 - Skim Milk.

Form No. 22 - Chocolate Milk. Too few plants keep these records.

Form No. 23 - Condensed Milk. The Farm Credit Administration can supply a mimeographed circular on "Standardizing Milk for Processing Purposes" which includes condensing and evaporating.

Form No. 24 - Drivers' Requisition and Sale Record.

Form No. 25 A,B,C, - Drivers' Requisition and Sale Record.

Form No. 26a, 26b - Drivers' Requisition and Sale Record.

Form No. 27a, 27b - Drivers' Requisition and Sale Record.

Form No. 28a, 28b - Drivers' Requisition and Sale Record.

A choice of one or another of drivers' forms may depend on the size of the business or on many other factors. It is a mistake for a large plant with many employees to use the simple forms of a smaller business. Records for a small volume of products are necessary. A small loss or waste in a small plant is relatively as serious as a large loss in a big plant, so it is not intended to minimize their importance any place; but size and numbers bring complications that can be met only by increased precautions. It is necessary for large plants to adopt protective measures in keeping with enlarged risks. Choose the type of record, either one of those illustrated or of another form best suited to your business.

Plant operators know most of the countless types of losses, committed carelessly or dishonestly, so it is not necessary to explain them here. However, don't think that your plant is an exception and free of them.

Form No. 29 - Ice Box Inventory. This is a simple form. Each plant should have a specially prepared form to suit its needs. Ice box inventory forms vary as much in type as drivers' requisitions. Frequently it is advisable to include in them all milk and skim milk products and maintain separate inventories of such items as butter and particularly ice cream.

An accurate record of all products going into an ice box should be kept and the man in charge should be held accountable for them.

A special receipt blank for products delivered out of the ice box during the day has not been illustrated, but such a form should be supplied the ice box man with a form for summarizing deliveries not otherwise requisitioned.

Form No. 4



Mr. _____

Your milk is refused
because of

- ☐ Bad Odor
- ☐ Too Warm
- ☐ High Bacteria
- ☐ High Acidity
- ☐ Sediment
- ☐ Dirty Inside
- ☐ Dirty Outside
- ☐ Too Rusty
- ☐ Open Seams
- ☐ Poor Cover
- ☐ Can Condemed

Form No. 3

_____ Association

Patron _____

Load _____ Can No. _____

Month of _____ 194__

Day	Weight	Test	BF
1-16			
2-17			
3-18			
4-19			
5-20			

12-27			
13-28			
14-29			
15-30			
31			
Totals			

Form No. 5

To _____ Association

_____ (Address) _____

Return Empty Cans to

Mr. _____

_____ (Address) _____

_____ 5's _____ 8's _____ 10's Weight _____

Month of ----- 194--

[illegible]

Month of ----- 194---

[illegible]

Form No. 9

STANDARDIZING RECORD

Date..... Batch No.....					Date..... Batch No.....					Date..
Vat No.	Product	Weight	Test	B. F.	Vat No.	Product	Weight	Test	B. F.	Vat No.
1	Milk				1	Milk				
2	"				2	"				
3	"				3	"				
Sub-total	"				Sub-total	"				
4	Cream				4	Cream				
5	"				5	"				
6	Skim				6	Skim				
Total					Total					

Date..... Batch No.....					Date..... Batch No.			
Vat No.	Product	Weight	Test	B. F.	Vat No.	Product	Weight	
1	Milk				1	Milk		
2	"				2	"		
3	"				3	"		
Sub-total	"				Sub-total	"		
4	Cream				4			

CREAM DISPOSITION

Month of _____ 194__

[illegible]

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[illegible]

ICE CREAM MIX FORMULA

Mix No. -----

Date ----- 194 --

Ingredients	Total Pounds	%	B.F.	%	S.S.	Non-dairy	Pounds			Total Solids
							B.F.	S.S.	Non-dairy	
Cane and Beet Sugar		X X		X X			X X			
Other Sugars-----		X X		X X			X X			
Gelatin		X X		X X			X X			
Eggs or Egg Yolk		X X		X X			X X			
Flavor-----		X X		X X			X X			
Cream					X X			X X		
Condensed Skim		X X			X X			X X		
" Whole					X X			X X		
Whole Milk					X X			X X		
Skim Milk		X X			X X			X X		
Butter				X X			X X			
Skim Milk Powder		X X			X X			X X		
Water		X X			X X			X X		X X
Totals										
Total Gallons in this Mix	Percent Total Solids -----									
Percent Butterfat	Percent Serum Solids -----									
Remarks										

Page No. ---

ICE CREAM SUMMARY

Form No. 15-

Month of ----- 194-----

[illegible]

Right hand page

[illegible]

D R Y C O T T A G E C H E E S E

Month of ----- 194 --

Day	Pasteurized			Making and Setting			Whey	Cooking		No. of	Salt	Produced		Packaging		
	Skim Milk	Starter	Rennet	Temp.	Time	Acidity		Temp.	Hrs.	Min.		Dry Curd	Yield	12 oz	1 #	Total
	Pounds	Acidity	Pounds	c.c.	Deg.	Hrs.	Min.	When Cut	Deg.	Hrs.	Min.	Pounds	%			Short
1																
2																
3																

C R E A M E D C O T T A G E C H E E S E

Month of ----- 194 --

Day	Cream and Flavors Added				Packaging			
	Dry Curd	Cream		Flavors	Creamed Cheese		Total	
	Used	Pounds	%	B.F.	Total Pounds	12 oz	1 #	Bulk Pounds Shrink
1								
2								
3								
4								

CONDENSED MILK

Month of ----- 194--

[illegible]

S.W. = Sweet Whole - P.W. = Plain Whole
S.S. = Sweet Skim - P.S. = Plain Skim

Right hand page

[illegible]

Driver's Requisition and Sale Record

Route No.---

Salesman-----

Date ----- 19---

Items	Load								Charges and Cash						
	Pk'g.	1st	2nd	Tot.	Ret'd	Net	Prices	Total Sale	Ticket	Wh's'le	All Cash	Col-lections			
	Sizes	Out	Out	Out	In	Sold		Amounts	Nos.	Charges	Sales	on Acc'ts			
Milk	Gals.														
	Qts.														
	Pts.														
	$\frac{1}{2}$ Pts.														
Light Cream	Gals.														
	Qts.														
	Pts.														
	$\frac{1}{2}$ Pts.														
Heavy Cream	Gals.														
	Qts.														
	Pts.														
	$\frac{1}{2}$ Pts.														
Chocolate Milk	Qts.														
	Pts.														
	$\frac{1}{2}$ Pts.														
Skim Milk	Gals.														
Lactic Buttermilk	Gals.														
	Qts.														
	Pts.														
Cottage Cheese	1 Lb.														
	5 Lb.														
	Bulk														
Butter	Solids														
	$\frac{1}{2}$ Lbs.														
	Bulk														
Total	Sales														
Total Sales						X			Cans, Cases and Bottles			Net			
Collections on Acc'ts.						X			Items	Out	Bot.	Sold	Ret'd.	Net	Amounts
Cans, Cases, and Bottles									Qts.						
Wholesale Charges						X			Pts.						
Retail "						X			$\frac{1}{2}$ Pts.						
Cash						X			Cans						
									Cases						
Short					X				Totals						

B (Load is Duplicate of Sheet A)

C (Reverse of Sheet B)

REQUISITION					
Route No. --- -- 19--					
Date -----					
Products	Requisition	Items	Ord.	Spec.	
Milk		Dals.			
		Qts.			
		Pts.			
		½ Pts.			

[illegible]

SETTLEMENT	
Route No.---	Date-----19---
Signed by-----	Driver-----
Driver's Daily Settlement	
Debits	Amount
Total Sales Today	
Collections on Accounts	
Cans - Cases - Bottles - Short	
Driver's Total Debits	

[illegible][illegible]

	XI	X
Driver's Total Debits	Credits	
Retail Charges		
Wholesale "		
Cash		
Cans - Cases - Bottles - Over		
Driver's Total Credits		
Net Shortage		
Collections	XX	I
Total Collections		

DAILY ROUTE REPORT 26

ROUTE _____ DATE _____

PRODUCT	ORDER	EXTRAS	RET.	NET	PRICE	AMOUNT
MILK - Gallons						
Quarts						
Pints						
1/2 Pints						
1/3 Pints						
HOMO - Gallons						
Quarts						
V. D - Quarts						
GUERNSEY - Quarts						
Pints						
COFFEE - Gallons						
CREAM - Quarts						
Pints						
22% - Quarts						
CREAM - Pints						
1/2 Pints						
SOUR CREAM						
XXX - Gallons						
CREAM - Quarts						
Pints						
1/2 Pints						
BUTTERMILK - Quarts						
Pints						
CHOCOLATE - Quarts						
Pints						
1/2 Pints						
SKIM MILK						
BUTTER						
EGGS						
CHEESE						
SPECIAL						
POINTS	BOTTLES		SALES			
WHOLESALE		OUT		TAX		
RETAIL		IN		TOTAL		
TOTAL		NET		BAL. BRO. FORD.		
SIGNED: _____				TOTAL CREDITS		
				BALANCE		

[illegible]

Form No. 28 a

ORIGINAL
SALESMAN'S ROUTE FORM

DATE		ROUTE NO.		DATE		ROUTE NO.		DATE		ROUTE NO.	
ORDER'S	DATE	OFFICE	PRODUCT	QUANTITY	UNIT	AMOUNT	QUANTITY	UNIT	AMOUNT	QUANTITY	UNIT
1	2		Sweet Milk	Qts							
			"	Qts							
			"	Pts							
			"	1/2 Pts							
			Buttermilk	Qts							
			"	Qts							
			"	Pts							
			Skimmed Milk	Qts							
			"	Qts							
			Whipping Cream	Qts							
			"	Qts							
			"	Pts							
			"	1/2 Pts							
			Coffee Cream	Qts							
			"	Qts							
			"	Pts							
			"	1/2 Pts							
			Choc Milk	Qts							
			"	Qts							
			"	Pts							
			"	1/2 Pts							
			Cottage Cheese	Lbs							
			"	12 oz							
			Butter	Lbs							
			"	Lbs							
			"	1/2 Cals							
			"	50 Pts							
			"	Qts							
			"	Qts							
			"	Pts							
			"	1/2 Pts							
			"	Corns							
			Ice Cream	Qts							
			"	Qts							
			"	Pts							
			"	12 oz							
			Ice Cream	Qts							
			"	Qts							
			"	Pts							
			"	12 oz							
			Ice Cream	Qts							
			"	Qts							
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